



*EPA expressed environmental obj's.  
with the proposed alt. 3. with  
potential adverse impacts to*

*EO-2  
980417*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue  
Seattle, Washington 98101

December 21, 1998

*cos, wildlife and  
riparian conserv-  
ation areas*

Reply To  
Attn Of: ECO-088

Mr. Tom Schmidt  
Ochoco National Forest  
P.O. Box 490  
Prineville, OR 97754

Dear Mr. Schmidt:

The Environmental Protection Agency has reviewed the Mill Project Timber Sales Draft Environmental Impact Statement (DEIS). We are submitting comments on the DEIS pursuant to our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The preferred alternative, Alternative 2, would result in the cutting of approximately 29.4 MMBF of timber on 6,366 acres, as well as fuels treatment, prescribed burning, new road construction, and precommercial thinning. Some timber cutting would occur in old growth stands, late and old structure stands (LOS), and in riparian habitat conservation areas (RHCAs). Nearly half of the logged acres will be yarded via helicopter. Our detailed comments concerning this proposal and the DEIS in general are enclosed with this letter.

The Forest Service has provided a diverse range of alternatives. Consequently, rather than assigning the entire project a single rating with respect to the anticipated environmental impacts of the proposed action, we have decided to rate the action alternatives individually. The rating that pertains to the adequacy of the DEIS applies to the entire document and all alternatives.

#### Environmental Impact of the Action

Based on its level of cutting, road building, yarding methods, and overall impacts to the ecosystem, we do not view **Alternative 3** as an acceptable option. **Alternative 2**, the Forest

Service's preferred alternative, is very similar to Alternative 3, except that substantial helicopter logging would replace some of the ground-based extraction in Alternative 3. While this reduces the impact within roadless areas, it would require a substantial reduction in timber sale receipts to finance the significant level of helicopter yarding, would not provide needed emphasis for wildlife and water quality concerns, and would allow for commercial timber cutting within old growth and late successional and old structured (LOS) stands, and within riparian habitat conservation areas (RHCAs). In addition, new road construction is substantial (5.2 miles), and there would still be significant disturbance within the roadless areas resulting from helicopter landing sites and other management activities. Consequently, we assign Alternative 2 a rating of **EO, Environmental Objections**.

**Alternative 4** prescribes only precommercial thinning and prescribed fire within old growth, LOS, and RHCAs and decreases the timber sale volume. However, the amount of new road construction (8.6 miles) and of ground based yarding, which includes no mention of low impact techniques such as snow roads, horse logging, or working over frozen ground, are high, and provisions for wildlife and water quality are low, while streams are already heavily degraded and impacted by sediment. Thus, we assign Alternative 4 a rating of **EC, Environmental Concerns**.

**Alternative 5**, from EPA's perspective, appears to be the environmentally preferred alternative among those presented, and would be our choice. While it could be improved by adding features from Alternatives 4 and 6, as well as including lower impact ground-based yarding techniques as described above, it prescribes a timber volume that is comparable to that of Alternatives 4 and 6 while minimizing new road construction (0.6 miles) and its many associated impacts. It also provides more for wildlife and forest ecosystem integrity in terms of number of snags (numbers supported by USFWS), downed logs, and fewer open roads, which allows for greater habitat security. In addition, it provides greater net sale value than either of Alternatives 2 or 6. EPA rates this alternative as **LO, lack of objections**.

**Alternative 6**, presented as an alternative that emphasizes water quality, increases the sale volume, road miles constructed (2.8 miles), and LOS commercial timber cutting over Alternative 5 levels, and lacks the prescriptions favoring wildlife. In



response to water quality, more helicopter logging is prescribed than in any other Alternative, a level similar to that of Alternative 2, but nevertheless with a resulting net sale value that is substantially higher than Alternative 2. Consequently, we rate Alternative 6 as **LO, lack of objections**, with the caveat that we prefer to see numbers of snags and down logs increase, new road miles decrease, and helicopter landings that are located outside both roadless areas.

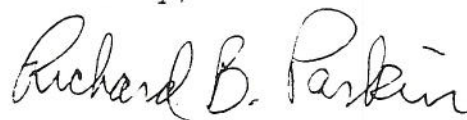
Ideally, we would like to see a new alternative developed--one that incorporates the best features of Alternatives 4, 5, and 6. We would welcome the opportunity to work with you to develop such an alternative.

#### **Adequacy of the Environmental Impact Statement**

We are concerned about the level and types of information that are lacking in the DEIS. The DEIS does not provide information that is vital to decision making, including (1) project area soil types and descriptions, slope stability, topography, geology or overall ecological risks of the proposed activities with respect to these elements; (2) location and environmental threats/benefits of roads being constructed, reconstructed, closed or obliterated; (3) if and how road closures would be effectively implemented to ensure cessation of use; and (4) the cumulative effects of these and other past, present, and reasonably foreseeable forest land management activities (for example, grazing). In light of these omissions, EPA assigns the DEIS a rating of **2, insufficient information**.

Our more detailed comments follow, and a description of the rating system is enclosed with this letter. If you have any questions regarding these comments or wish to discuss the project further, please contact Elaine Somers of my staff at (206) 553-2966. She would be pleased to discuss a modified alternative with you as well. Thank you for the opportunity to comment.

Sincerely,



Richard B. Parkin, Manager  
Geographic Implementation Unit

Enclosures

EPA Region 10  
Detailed Comments for Mill Project Timber Sales

**Water quality and aquatic habitat.** Mill Creek is not meeting State Water Quality standards for temperature, and is deficient in shade, large woody debris, and pool habitat (p. 1-4). The stream banks are unstable, there is excessive sedimentation the entire length of Mill Creek, and hydrologically the stream has become more sensitive to runoff events with increased peak flows. There are also high sediment levels in Dry Creek, West Fork Mill Creek, and Harvey Creek.

Temperature. On page 3-15 of the DEIS, the Forest Service indicates that "there is a potential to increase water temperature in intermittent non-fish bearing streams, ... but this would not result in a violation of state water quality standards." It is not specified whether the Forest Service is referring to water quality violations in the intermittent streams or in downstream reaches. Regardless of the water body, we find no basis for this conclusion in the DEIS. Elevated stream temperatures in intermittent streams would contribute to the cumulative effect of elevated downstream temperatures. When a water body fails to meet state water quality standards, the project proponent must demonstrate no net increase--and preferably a net decrease--in the parameter(s) for which the water body is listed. The basis for the analysis and conclusions that would demonstrate no net increase or a net decrease is a watershed analysis. If there is information from the watershed analysis that would support the above conclusion, it should be included in the DEIS.

Channel stability. As stated on page 3-15 regarding Alternative 4, which would not prescribe entry into RHCAs, dead trees that fall into or adjacent to the channel would add to channel stability, catch sediment, and provide cover and structure to the channel. Since the channel is deficient in large woody debris (LWD), pool habitat, and exhibits unstable banks, leaving the fallen dead trees in place and allowing natural selection to provide for future LWD would greatly benefit the stream. Tree vigor of remaining trees would be improved over a longer period of time than with thinning, but the natural death



of trees would provide badly needed large woody debris both in the stream channel and on the forest floor. Consequently, arguments for logging within the RHCA's are not particularly compelling in terms of providing for both short and long term aquatic ecosystem health.

Sediment. On page 3-37, the DEIS indicates that 90% of the sediment is generated from within 400 feet of the channel. Draw bottom roads and stream crossings are the two primary contributors of sediment, and the road densities *within 400 feet of stream channels* are high (p. 3-11): 3.16 miles/square mile in Lower Mill subwatershed; 2.52 in Dry Creek subwatershed; 0.17 in East Fork subwatershed; and 2.90 in West Fork subwatershed. In light of this, and in the interest of Clean Water Act antidegradation directives, we would hope to see alternatives that call for obliteration of at least several miles of draw bottom roads. We are disappointed that all action alternatives prescribe obliteration of only 1.6 miles of road, and the DEIS does not inform as to the location of this 1.6 mile segment.

In addition, where ground-based extraction methods are prescribed, we recommend that the Forest Service consider using low impact methods, e.g., snow roads, working over frozen ground, or horse logging, to minimize soil compaction and displacement.

**Roads.** In addition to the comments above concerning roads, we note that the action alternatives vary in miles of road closures from 7.3 (Alternatives 2 and 3) to 26.4 (Alternative 5). The DEIS should describe what road closure means, i.e., what measures will be taken to ensure that the public does not gain access? The DEIS indicates that non-gated road closures are often not effective (p. 3-24). What differences in levels of sedimentation might be expected from closed vs. open roads? What level of maintenance is required to ensure that closed roads do not become significant sources of sediment, and will that maintenance occur? The anticipated effectiveness for wildlife should be adjusted to reflect the poor compliance rate for non-gated road closures. We also recommend that truly effective road closure techniques be implemented.

The preferred Alternative 2 calls for building an additional 5.2 miles of road. There is no information provided as to the location of new proposed roads for this or any of the other

action alternatives. Will they also be located in draw bottoms? On steep slopes or unstable soils? All action alternatives except Alternative 5 would result in a net increase in the road miles and density in the project area. We recommend that the Final EIS propose a net decrease in road miles and density in order to work toward the ICBEMP goal of 0.7 mile/square mile. The FEIS should provide information to reviewers and decision makers about the location and nature of ecological risks associated with any new or reconstructed roads. At a minimum, this should include impacts to wildlife (including large mammal security areas), fisheries, water quality, spread of noxious weeds, and habitat loss and fragmentation.

As noted in our scoping letter of April 15, 1998, based upon earlier phone conversations with your staff, we understand that at least two roads currently closed due to slumps or hillside failures are planned for re-construction. One of these two roads is adjacent to a stream and poses a significant threat to the aquatic system. Is this still the case? Are there other roads that pose similar threats? The Forest Service needs to disclose this information in the EIS.

**Old growth and late and old structure stands.** Forest plan amendments allowing commercial cutting of old growth and late and old structure stands would be necessary to implement Alternatives 2,3,5, and 6 (p. 1-5). The basis for establishing these old growth and LOS stands should be discussed in the EIS, and the effects of entering these areas be examined on a landscape scale and in the context of cumulative effects, particularly to wildlife.

**Soils, Geology, Topography.** The DEIS includes no description of soil characteristics, key limitations or sensitivities, unstable areas, steep slopes, geology, etc. This information is critical to evaluating the risks posed by proposed actions and needs to be included in the Final EIS.

**Roadless areas.** As stated in our scoping letter, we urge that no actions occur that would be precedent-setting with the potential to significantly affect the integrity of the roadless areas and compromise long-term resource options. While it is good that the Forest Service is not proposing to build roads in these areas, all action alternatives except Alternative 4



prescribe commercial logging using helicopters, as well as other management activities, e.g., thinning and prescribed fire inside the Mill Creek and Green Mountain roadless areas. Alternative 4 does prescribe precommercial thinning and prescribed fire in these areas, and Alternative 6 would locate helicopter log decks (landings) outside the Mill Creek roadless area but, apparently, inside the Green Mountain roadless area. Because of the importance of roadless areas as refugia for fish, wildlife, and plant species, and as foundations for ecosystem recovery, we urge that the Forest Service either (1) adopt the Alternative 4 prescription for the roadless areas, or (2) at least locate the helicopter landings outside both roadless areas.

**Snags and Down Logs.** The Fish and Wildlife Service recommends at least 6 snags per acre. Only Alternative 5 meets this prescription, and only for snags less than 20" dbh. We urge that the Forest Service incorporate this higher level of snag retention in the selected alternative, as well as the higher levels of down wood (42.7/acre) prescribed in Alternative 5. At a minimum, these higher levels should be prescribed for the roadless areas. This would help to compensate for areas within the watershed that are deficient in snags and down logs as a result of extensive logging and intensive management (p. 3-25).

**Cumulative Effects.** The DEIS includes no discussion of cumulative effects of the proposed actions and other past, present, and reasonably foreseeable land management activities (including grazing), upon all resource categories evaluated in the EIS. This is a significant omission that needs to be addressed in the Final EIS.

**Alternatives.** The DEIS presents 6 alternatives. Alternative 1 is the no action alternative; Alternative 2 is the preferred alternative, generates the lowest financial return, and is the most similar to Alternative 3, which is the most aggressive alternative in terms of cutting and maximum revenue generation; Alternative 4 eliminates entry into old growth, LOS, and RHCAs and would not require a Forest Plan amendment; Alternative 5 emphasizes wildlife considerations; Alternative 6 emphasizes water quality.

While there is a range of alternatives presented, we feel that the best alternative would be one that is less aggressive,

more financially sound, and more protective of sensitive resources than the preferred Alternative 2. Because the Forest Service is responsible for providing for ecological structure/integrity, wildlife, and water quality--not only one or another--a combination of Alternatives 4, 5, and 6 would appear to be most appropriate. Alternative 2 does not appear to be adequately protective of any of these elements, although it does prescribe substantial helicopter logging in place of ground-based extraction within roadless areas at a substantial cost and reduction to net timber sale proceeds. Because Alternative 2 produces the lowest financial return among the alternatives presented, the purpose and main emphasis of Alternative 2 appears to be timber production. Based upon the analysis of alternatives presented in the DEIS, the Forest Service could effect less disturbance to the ecosystem while achieving a greater net financial return by choosing Alternative 4, 5, or 6.

We recommend that the Forest Service take elements from Alternatives 4, 5, and 6 to construct a new preferred alternative. We would welcome the opportunity to discuss the elements selected with you to fashion a project that maximizes the health and integrity of the ecosystem while improving net financial returns. If that is not an acceptable solution, then we would recommend selection of Alternative 5, with some adjustments, as the preferred alternative. However, Alternatives 4 and 6 would also be preferable over Alternative 2. Based on its level of cutting, road building, yarding methods, and overall impacts to the ecosystem, we do not view Alternative 3 as an acceptable option.